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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/646,194	09/14/2000	Hisashi Saiga	55051(1117)	5757

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EXAMINER

BASOM, BLAINE T

ART UNIT	PAPER NUMBER
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2173

DATE MAILED: 09/26/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/646,194

Applicant(s)

SAIGA ET AL.

Examiner

Blaine Basom

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 28-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 28-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

The Examiner acknowledges the Applicants' cancellation of claims 1-27, the amendments to claims 28-36, and the addition of new claims 38-47. Regarding claims 28-47, the Applicants argue that Warnock et al. (U.S. Patent No. 5,634,064, hereinafter referred to as "Warnock") is directed to storing an entire document in computer memory as a Portable Document Format (PDF) document, and therefore does not teach recording display data in "pre-specified units" having display information and scroll display information, as has been added to the claims. These arguments been subsequently considered, but are moot in view of the new grounds of rejection which follow.

Regarding claims 42 and 32, the Applicants contest that Ota (Japanese Patent No. 5-323941) does not teach setting the scroll display speed of display data at that intended by the original creator of the display data. Nevertheless, the claims do not express setting the scroll display speed of display data at that intended by the original creator of the display data. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Claims 32 and 42 do express scroll display control information that includes information specifying a scroll display speed. However, as is shown below, Ota teaches providing such scroll display control information.

Claim Objections

Claims 36 and 46 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claims, or amend the claims to place the claims in proper dependent form, or rewrite the claims in independent form. In particular, the claims are written in the form of a preamble made to depend on another claim. The stated preamble is not given patentable weight as it fails to breathe life, meaning, and vitality into the claims. As such, the claims fail to further limit the subject matter of the claim(s) upon which they depend. See MPEP §§ 608.01(n) and 2111.02.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 35 and 44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding claim 35, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d). In claim 44, the phrase "...for specifying a scale of enlargement or reduction of a display area for scroll display of its associated on the screen of a display device" renders the claim indefinite, as there exists no entity described by the adjective, "associated."

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 28-47 are rejected under 35 U.S.C. 102(b) as being anticipated by the “Portable Document Format Reference Manual, Version 1.2,” which is attributed to Bienz et al. (and hereafter referred to as “Bienz”). In general, Bienz describes the Portable Document Format (PDF), a file format used to specify electronic documents such that the documents are easily and reliably exchanged and viewed (see section 2.1, on page 27). As these PDF documents are stored as files (see section 2.3.2, on page 30), which are interpreted to be maintained in computer memory, such a computer memory is considered a data storage medium with display data recorded thereon.

Regarding claims 28-29 and 38-39, Bienz discloses that a PDF document is implemented by a hierarchy of objects included within a PDF file (see section 6.1 on page 71). In particular, each page of the document is realized by a corresponding “Page object,” the Page object being efficiently accessed through a “Pages tree” structure (see section 6.3, beginning on page 75). Each Page object describes the content and functionality of a single document page (see section 6.4, beginning on page 77). Consequently, the display data of the PDF document is understood to be recorded in the form of pre-specified units, specifically these Page objects. Particularly, Bienz discloses that each Page object comprises a “Contents” parameter, which references the page description of its corresponding document page (see section 6.4, on page 78). Because this

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page description specifies the text, graphics, and images of the page (see chapter 8, page 209), the Contents parameter and its associated page description are consequently considered “display information,” like that recited in the present application. Specifically regarding claim 38, it is interpreted that this page description may comprise image data objects and associated management information for these objects (for example, section 8.1 beginning on page 209). Bienz further discloses that each Page object also comprises a “B” parameter, which references the “article beads” on the page (see section 6.4 on page 78). An article bead is associated with a distinct section of an article, whereby a plurality of such beads may be linked into a common “thread,” so that a user may read an entire article by scrolling from one article bead to the next, rather than from one page to the next (see section 6.12, beginning on page 111). In particular, each bead includes a “P” parameter and an “R” parameter, which identify the page and page location, respectively, on which its associated article section appears (see Table 6.44 on page 112). It is understood that this page location is specified in a coordinate system according to the coordinate values assigned to its associated article section (for instance, the R parameter is denoted by 4 values, wherein these 4 values identify the coordinates of the corners of the rectangle surrounding the associated article section, as is described in section 7.1 on page 133). Additionally, each bead includes a “T” parameter, a “V” parameter, and an “N” parameter, which respectively identify the thread on which the bead belongs, the previous bead in the thread, and the next bead in the thread (see Table 6.44 on page 112). The beads are thus linked into a common thread such that a user may scroll from bead to bead, i.e. article section to article section, in order to read an entire article. It is interpreted that in doing so, the above-described T, V, and N parameters are used to move from one bead to the next, whereby for each bead, the

above-described P and R parameters reference the bead's associated article section, which is displayed at an appropriate zoom level (for example, see section 6.12 on page 111). The beads referenced by the B parameter therefore specify a scroll path through the document, in a coordinate system defined by each page according to coordinate values assigned to the article sections in each page. Consequently, the B parameter and its associated article beads are considered "scroll display control information," like that recited in the present application. Thus to summarize, Bienz presents a PDF file wherein document display data is recorded in the form of pre-specified units, specifically Page objects, and wherein each Page object includes display information identified by a Contents parameter, and scroll display information identified by a B parameter, the scroll display information specifying the display path of the display information in a coordinate system defined by the page according to coordinate values assigned to the display information in the page.

With respect to claim 30, the B parameter of Bienz, and its referenced article beads, are considered "scroll display control information," as is described in the previous paragraph. Each of the article beads referenced by a B parameter is understood to define an interval, i.e. article section, on a given document page. In particular, this article section is specified by the R parameter of the bead (see Table 6.44 on page 112), whereby this R parameter comprises four coordinate values, the coordinate values defining a rectangle surrounding the particular article section (see section 7.1 on page 133). As is well known, a rectangle is comprised of four line segments: two parallel line segments extending in a first direction, and two parallel line segments extending in a second, transverse direction. Thus the plurality of article beads referenced by the

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B parameter defines a plurality of intervals, i.e. article sections, the intervals being specified by rectangles, or in other words, by line segments having different directions in a coordinate system.

Concerning claim 40, the B parameter of Bienz, and its referenced article beads, are considered “scroll display control information,” as is described above in the paragraph regarding claims 28 and 29. Moreover, as is described above, each bead comprises a V parameter and an N parameter for linking with the previous and next beads, respectively, of the thread in which the bead belongs (see Table 6.44 on page 112). It is consequently understood that with the V parameter and the N parameter, one may scroll through the beads of an article thread in both the forward and reverse directions. Thus the scroll display control information includes information for scrolling the document contents, i.e. image data objects, in selected directions, the directions being different relative to one another.

Regarding claims 31 and 41, the B parameter of Bienz, and its referenced article beads, are considered “scroll display control information,” as is described above in the paragraph regarding claims 28 and 29. Moreover, each bead comprises a V parameter and an N parameter, which as described above, are for linking with the previous and next beads, respectively, of the thread in which the bead belongs (see Table 6.44 on page 112). As an article may have sections scattered throughout the various pages of a document, it is understood that such a previous or next bead, which defines such article sections, may be on a different document page.

Consequently, Bienz teaches that the scroll display control information, i.e. article beads, may include information for linking with the beads on another document page, or in other words, may include information for linking with scroll display control information of another pre-specified unit.

Referring to claims 33 and 43, the B parameter of Bienz, and its referenced article beads, are considered “scroll display control information,” as is described above in the paragraph regarding claims 28 and 29. As further shown above, each bead includes a R parameter, which delineates a specific article section by means of four coordinate values, these coordinate values defining a rectangle. The beads are linked into a common thread so that a user may scroll from bead to bead in order to read an entire article, whereby for each bead, the content bounded by this rectangle is displayed at an appropriate zoom level (for example, see section 6.12 on page 111). Thus the scroll display control information taught by Bienz includes information, particularly this R parameter, which specifies display information, namely article sections, which as described above are associated with selected areas of the coordinate system defined by each page. By the same reasoning, this R parameter is understood to specify a scroll display area on the display screen.

As per claims 34 and 44, the B parameter of Bienz, and its referenced article beads, are considered “scroll display control information,” as is described above in the paragraph regarding claims 28 and 29. Each bead includes an R parameter, which as shown above, delineates specific document content by means of four coordinate values, these coordinate values defining a rectangle about the content. The beads are linked into a common thread so that a user may scroll from bead to bead in order to read an entire article, whereby for each bead, the content bounded by this rectangle is displayed at an appropriate zoom level (for example, see section 6.12 on page 111). Consequently, it is understood that the size of such a rectangle affects the amount of zoom for the document content referenced by the bead; for example, if the rectangle is the size of an entire page, the document content may not be zoomed much, whereas if the rectangle is much

smaller, the document content may be enlarged more significantly. Thus the scroll display control information taught by Bienz includes information, specifically the rectangle identified by the R parameter, which intrinsically specifies a scale of enlargement or reduction of a display area for scroll display.

As per claims 35 and 45, the B parameter of Bienz, and its referenced article beads, are considered "scroll display control information," as is described above in the paragraph regarding claims 28 and 29. Such an article bead includes a R parameter, which as shown above, references specific document content by means of four coordinate values, these coordinate values defining a rectangle about the document content. Regarding the claimed invention, Bienz discloses that PDF documents may include movies and sounds (see section 1.3 on page 20). It is therefore understood that the document content referenced by the above-described R parameter may comprise movies and/or sounds. Consequently, the scroll display control information taught by Bienz includes synchronous reproduction information, namely the R parameter, which specifies data content to be reproduced in synchronism with the scroll display, and wherein this data content may comprise non-motionless data such as sound and/or moving images.

In reference to claims 36-37 and 46-47, Bienz discloses that a computer is used for reproducing and displaying a PDF document (for example, see section 2.2 on page 28). As described above, such a PDF document is stored in a storage medium and is scrolled based on the above-described scroll display control information. Such a computer presenting the PDF document described by Bienz is therefore considered a "display device," like that recited in claims 36 and 46. Specifically regarding claim 37, it is understood that this computer comprises a processing unit, as known in the art, whereby this processing unit ultimately implements and

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controls the scroll display of the image on the computer's display screen. Consequently, such a processing unit is considered a "scroll indicating means," like that recited in claims 37 and 47.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 32 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over the above-described PDF documents taught by Bienz, and also over Japanese Patent No. 5-323941, which is attributed to Michihiro Ota (and hereafter referred to as "Ota"). As described above, Bienz discloses a data storage medium with display data recorded thereon, wherein like recited in each of claims 28 and 38, the display data is provided with information for scroll display on a display screen. This information for scroll display comprises a B parameter and its referenced beads, as is described above. A plurality of such beads are linked into a common thread, so that a user may read an entire article by scrolling from one article bead to the next, rather than from one page to the next (see section 6.12, beginning on page 111). Bienz however does not explicitly disclose that this information for scroll display includes information specifying a scroll display speed, as is expressed in each of claims 32 and 42.

Like Bienz, Ota discloses a method for presenting a document on a display screen, whereby the document can be scrolled. Regarding the claimed invention, Ota teaches that the scroll speed may be varied according to the number of characters displayed (see the abstract of Ota). Consequently it is understood that the document described by Ota is associated with information for scroll display, wherein this information for scroll display includes information on a scroll display speed.

It would have therefore been obvious to one of ordinary skill in the art, having the teachings of Bienz and Ota before him at the time the invention was made, to modify the information for scroll display taught by Bienz, such that the articles may be scrolled at a rate proportional to the number of characters displayed, as is taught by Ota. It would have been advantageous to one of ordinary skill to utilize such a combination because the resulting document scrolling speed would match the document reading speed of a user, as is taught by Ota (see the abstract of Ota). This is a desirable attribute for a document displaying system. Thus with this combination of Bienz and Ota, the beads of an article thread are each scrolled at a rate proportional to the number of characters displayed in the article section associated with each bead. In other words, the content of the article section implicitly specifies the scroll display speed of that section. The content of such article section is determined by the P and R parameters of the bead associated with that article section, as is described above in the rejection for claims 28-29 and 38-39. Thus the P and R parameters of each bead specifies the content of an article section, which in turn includes information (namely the characters displayed in that article section) that determines the scroll display speed, and therefore, the P and R parameters are understood to inherently include information specifying the scroll display speed. Consequently

with this combination of Bienz and Ota, the scroll display control information includes information specifying a scroll display speed.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blaine Basom whose telephone number is (703) 305-7694. The examiner can normally be reached on Monday through Friday, from 8:30 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on (703) 308-3116. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 305-3900.

btb



JOHN CABECA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2173